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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,339	06/11/2001	Kenneth H. Abbott	294438022US3	6518
500	7590	01/04/2005	EXAMINER	
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVE SUITE 6300 SEATTLE, WA 98104-7092			HAILU, TADESSE	
			ART UNIT	PAPER NUMBER
			2173	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/879,339

Applicant(s)

ABBOTT ET AL.

Examiner

Tadesse Hailu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 72-75 and 82-163 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 82-96 and 139-150 is/are allowed.
- 6) ☒ Claim(s) 72-75, 97-138 and 151-163 is/are rejected.
- 7) ☒ Claim(s) 155 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/25/02, 10/3/03, 4/14/04</u>  | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. This Office Action is in response to the AMENDMENT entered on September 23, 2004 for the patent application number 09/879,339 filed on June 11, 2001.
2. The present patent application claims priority from US Application number 09/216,193 filed December 18, 1998.
3. The pending claims 72-75 and 82-163 are examined as follows.
4. Based on the Applicant's amendment made to claims rejected under Double-patenting rejection, the Double-patenting rejection is now withdrawn.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) The invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 72-75, 97-115, 117-119, 121-138, 151-154, and 156-161 are rejected under 35 U.S.C. 102(a) as being anticipated by John Bates, et al., "Middleware Support for Mobile Multimedia Applications," (1997).

With regard to claim 72:

Bates et al discloses a Middleware Support for Mobile Multimedia Applications. One of the middleware services offered is a trader. A trader is used to locate objects in an environment (see fig. 1, and section 5.2). The middleware support enables applications to follow registered mobile users as they move.

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Bates further discloses monitoring activities of a module related to at least one of the state attributes such as, nearest electronic equipment to the user, location of the user, etc (see section 2.4). Bates also describes the trader receives a request from a client application. The request may include interest in receiving notification when a specified event that is related to at least one of the context attributes occurs (Bates, section 2.2). Bates also describes automatically determining an event that matches the received request (section 2.5), wherein the determining is based on the monitored module (section 2.5). Bates also describes automatically monitoring (sections 2.3, and 2.5) for complex occurrence of information related to the at least one context attributes for an indication of an occurrence of the specified event, such monitoring for example includes to automatically inform or notify the user (David) when his friend (John) enters his room (sections 1.1 and 2.2, Figs. 4, 5). Bates further describes asynchronously informing clients when events of interest occur (section 8)

With regard to claim 73:

As per "... the monitored activities of the module include supplying of values of state attributes from others, and wherein the determined event is related to availability of a value of at least one state attribute." (see Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 74:

As per "... the event is availability of a source for supplying values of a first state attribute." (see Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 75:

As per "... the state attributes represent information about a user of the computer." (see Bates, sections 2.2 and 2.3).

With regard to claim 97:

Bates discloses a method in a computer for providing information about a current state of the mobile user that is modeled with multiple state attributes, such as nearby devices to the user and location of the user (Bates, sections 2.2, 2.3, Fig. 2); the method includes receiving from a client module or user a request to receive notification when a specified type of occurrence related to at least one of the multiple state attributes is detected, for example such occurrence event includes Davis may want to be notified when John moves (condition satisfied) to his room or to another room (Bates, sections 1.1-2.4, Fig. 2);

With regard to claim 98:

As per "The method of claim 97 wherein the detecting of the occurrence includes monitoring received information." (Bates, sections 2.2 and 2.3; Fig. 2).

With regard to claim 99:

As per "The method of claim 97 wherein the detecting of the occurrence includes detecting changes in the modeling of the current state." (Bates, sections 2.2 and 2.3; Fig. 2);

With regard to claim 100:

As per "The method of claim 97 wherein the determined type of occurrence is satisfaction of a condition related to a value of at least one of the state attributes, and wherein the detecting of the occurrence includes analyzing

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changes in the values of the at least one state attributes in order to determine when the condition is satisfied.” (Bates, sections 1.1-2.4, Fig. 2).

With regard to claim 101:

As per “The method of claim 97 wherein at least one of the determined modules is a source of values for at least one of the state attributes.” (Bates, sections 2.2 and 2.3; Fig. 2).

With regard to claim 102:

As per “The method of claim 97 wherein the at least one of the determined modules is a consumer of values for at least one of the state attributes.” (Bates, sections 2.4, 5.2, Fig. 2).

With regard to claim 103:

As per “The method of claim 97 wherein the determined type of occurrence is a change in a value of a determined state attribute.” (Bates, sections 2.2-2.3).

With regard to claim 104:

As per “the method of claim 97 wherein the determined type of occurrence includes a source becoming available to supply values for a determined state attribute.” (Bates, sections 2.2-2.3).

With regard to claim 105:

As per “The method of claim 97 wherein the determined type of attribute that satisfies a occurrence includes availability of a value of a determined state attribute determined criteria.” (Bates, sections 1.1-2.3).

With regard to claim 106:

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As per "The method of claim 97 wherein the determined type of occurrence includes a determined source becoming available to supply state attribute values, and wherein the detecting includes determining that the determined source is currently able to supply state attribute values." (Bates, sections 2.2 and 2.5).

With regard to claim 107:

As per "The method of claim 97 wherein the determined type of occurrence includes a determined client becoming available to receive state attribute values." (Bates, sections 2.2 and 2.5).

With regard to claim 108:

As per "The method of claim 97 wherein the determined type of occurrence includes at least one client expressing art interest in receiving values of a determined state attribute." (Bates, section 2.4).

With regard to claim 109:

As per "the method of claim 97 wherein the computer has access to various devices, and wherein the determined type of occurrence includes a value of one of the state attributes indicating that access to a determined device has become available." (Bates, sections 2.2-2.3).

With regard to claim 110:

As per "The method of claim 97 wherein the determined type of occurrence includes access to a determined group of themed attributes becoming available." (Bates, sections 2.2-2.3).

With regard to claim 111:

As per "The method of claim 97 wherein the providing of the information about the current state is performed by a characterization module, and wherein the determined type of occurrence includes a value of one of the state attributes indicating that access to determined other functionality provided by the characterization module has become available." (Bates, sections 4.2 and 5.2-5.3, Fig. 1).

With regard to claim 112:

As per "The method of claim 111 wherein the other functionality is a determined mediator." (Bates, sections 4.2 and 5.2-5.3, Fig. 1).

With regard to claim 113:

As per "The method of claim 97 wherein the determining of the type of occurrence includes determining a number of times that the notifying of the determined modules is to occur." (Bates, sections 1.1-2.2 and 4.2).

With regard to claim 114:

As per "The method of claim 97 wherein the determining of the type of occurrence includes determining times during which the notifying of the determined modules is to occur." (Bates, sections 1.1-2.2 and 4.2).

With regard to claim 115:

As per "The method of claim 97 wherein the state attributes represent information about a user of the computer." (Bates, section 1.1).

With regard to claim 117:

As per "the method of claim 97 wherein the state attributes represent information about the computer." (Bates, sections 1.1-2.2 and 4.2).



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With regard to claim 118:

As per "The method of claim 97 wherein the state attributes represent information about a physical environment." (Bates, Figs. 1-6).

With regard to claim 119:

As per "The method of claim 97 wherein the state attributes represent information about a cyber-environment of a user of the computer." (Bates, section 5.3).

With regard to claim 121:

As per "The method of claim 97 wherein the notifying of a module of a detected occurrence prompts the module to present information to a user of the module." (Bates, section 5.3 and 6.2).

With regard to claim 122:

As per "The method of claim 97 wherein the notifying of a module of a detected occurrence includes supplying information about the detected occurrence." (Bates, section 1.3).

With regard to claim 123:

As per "the method of claim 97 wherein the determining of the type of occurrence includes determining an event whose occurrences are occurrences of the determined type." (Bates, sections 1.1-2.2).

With regard to claim 124:

Bates discloses a computing device for providing information about a current state of the mobile user that is represented with multiple attributes, including user's location and nearby electronic devices. Bates

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further includes a Middleware service (trader), a request receiver component that is capable of receiving from a client application (module) a request to receive notification when a specified type of occurrence related to at least one of the multiple state attributes is detected (Bates, sections 2.2, and 2.3); and the Middleware service (trader) also includes a notifier component that is capable of, after the receiving of the request, detecting an occurrence of the specified type and notifying the module of the detected occurrence (Bates, sections 2.2, and 2.3, Fig. 1).

With regard to claim 125:

As per "the computer-readable medium of claim 124 wherein the computer-readable medium is a memory of the computing device." (Bates, Fig. 1).

With regard to claim 126:

As per "The computer-readable medium of claim 124 wherein the computer-readable medium is a data transmission medium transmitting a generated data signal containing the contents." (Bates, section 6.3).

With regard to claim 127:

The claim is a computing device claim corresponds to claim 124, thus, is rejected under the same reasons given to the rejection of claim 124.

With regard to claim 128:

As per "the computing device of claim 127 wherein the analysis component, the detection component and the notifier component are part of an

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intermediary module executing in memory of the computing device.” (Bates, section 2.2).

With regard to claim 129:

As per “the computing device of claim 127 comprising multiple sources and multiple clients executing in memory of the computing device.” (Bates, sections, 5-2-5.3; Figs. 5 and 6).

With regard to claim 130:

The claim is a computing device claim corresponds to claim 124, thus, is rejected under the same reasons given to the rejection of claim 124.

With regard to claim 131:

The claim corresponds to claim 124, thus, is rejected under the same reasons given to the rejection of claim 124.

With regard to claim 132:

As per “The method of claim 131 wherein the context attributes represent information about a user of the portable computer.” (Bates, sections 1.1, 2.2, Figs. 4 and 5).

With regard to claim 133:

As per “The method of claim 131 wherein the context that is represented is a current context.” (Bates, section 1.1, Fig. 5).

With regard to claim 134:

As per “The method of claim 131 wherein at least one of the determined types of events is availability of a source for supplying values of a specified context attribute.” (Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 135:

As per “The method of claim 131 wherein at least one of the determined types of events is availability of a specified source for supplying values of at least one context attribute.” (Bates, sections 2.2, Figs. 2, 5 and 6).

With regard to claim 136:

As per “The method of claim 131 wherein receiving of the notifications by the modules prompts the modules to present information to users.” (Bates, section 2.24).

With regard to claim 137:

Independent claim 137 corresponds generally to independent claim 131 and recites similar features in storage medium form, and therefore is rejected under the same rationale.

With regard to claim 138:

The claim corresponds to claim 72, thus, is rejected under the same reasons given to the rejection of claim 72:

With regard to claims 151, 157, and 158:

The remaining independent claims, while not necessary identical in scope, contain limitations similar to independent claim 124 and therefore are rejected under the same rationale.

With regard to claim 152:

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As per “the detecting of the occurrence of the determined type is based at least in part on the received information.” (Bates, sections 2.2 and 2.3; Fig. 2).

With regard to claim 153:

As per “the detecting of the occurrence of the determined type is based at least in part on additional information received for one or more values of state attributes.” (Bates, sections 2.2, 2.3).

With regard to claim 154:

As per “the additional information for each of the one or more values is metadata for the value.” (Bates, section 2.2).

With regard to claim 156:

As per “the additional information for each of the one or more values includes information related to one or more times at which the value is accurate.” (Bates, section 2.2).

With regard to claim 159:

As per “the detecting of the occurrence of the determined type is based at least in part on the generated modeled values of the other state attributes.” (Bates, sections 1.3, and 2.2).

With regard to claim 160:

As per “the detecting of the occurrence of the determined type is based at least in part on generated modeled values of state attributes.” (Bates, sections 1.3, and 2.3).

With regard to claim 161:

As per "the other state attributes at the higher level of abstraction model a physical activity of a user of the computing system." (Bates, sections 1.2, and 1.3).

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 116, 120, 162, and 163 are rejected under 35 U.S.C. 103(a) as being unpatentable over John Bates, et al., "Middleware Support for Mobile Multimedia Applications," (1997) in view of Schmidt, et al., "There is more to context than location," (November 1998).

While Bates discloses information reflecting the physical location of a target user and a nearest electronic device to a target user, Bates does not show information reflecting a modeled mental state of the user, an emotional state of a user, a cognitive load of a user and the state attributes representing current predictions about a future state. However, Schmidt et al. discloses a plurality of sensory devices attached to a computer including, among others, a sensor to reflect the mental state of the user (Fig. 1, section 3.1).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate Schmidt's sensory devices with Bates because incorporating a plurality of sensory devices will be advantageous for a better understanding, modeling or representing of the user of the device or the device.

***Allowable Subject Matter***

7. Claims 82-96, and 139-150 are allowed:

The following is an examiner's statement of reasons for allowance:

These claims recite a method in a computing environment for providing information about a current state of a user of a computer. While the prior art of records recite a method in a computing environment for providing information about state of a computer user in and the user's environment. But the prior art of records does not explicitly describe the claimed combination steps, component modules and the combined functional steps performed by these component modules as claimed. Thus, the prior art of records does not anticipate or render the above claims.

8. Claim 155 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not teach "the additional information for each of the one or more values includes uncertainty information for the value."

***Response to Arguments***

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9. Applicant's arguments filed September 23, 2004 have been fully considered but they are not persuasive.

Applicant argues that "neither Bates nor Schmidt appear to include any teaching or suggestion to automatically identify or determine events that may be of interest to an external entity, such as based on monitoring relevant activities to assist in that automatic identification or determination." The Examiner argues because the Bates describes a network detectors that allows the location of the user to pinpointed. Then, the location service collects badge events (i.e. automatically) and then passes them the event server library using the operation signal. If an event matches any registered templates, the event system will notify (i.e. automatically) the appropriate client (s) (see section 2.5 ). Thus, for at least this reason, some of the previous and currently pending claims are still rejected over Bates and Schmidt.

### Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory



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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (571) 273-4051. The Examiner can normally be reached on M-F from 10:00 - 630 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (571) 273-4048 Art Unit 2173.

10. An inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

*Tadesse Hailu*

12/23/2004



JOHN CABECA  
SUPERVISORY PATENT EXAMINER  
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